In the Specification

Please delete Paragraph [0030] beginning on page 9, and replace it with the following amended paragraph:

[0030] A critical component for achieving the foregoing beneficial results of the invention is that the underfill material, in its uncured state, comprise a polymeric material having a filler material present in an amount ranging from about 60% by weight per solution to about 64% by weight per solution, with the filler material having ~~a~~ particle sizes ranging from about 2% to about 33%, preferably from about 11% to about 20% of a gap height residing between the organic board and the substrate within the space. Also in its uncured state, the preferred underfill material has a density ranging from about 1.5 g/cc to about 2.0 g/cc, a viscosity at 25°C greater than about 5,000 cP, and a Thixotropic Index ranging from about 1.0 to about 2.0. In its cured state, the underfill material has a glass transition temperature ranging from about 135°C to about 145°C, and a dynamic tensile modulus strength at about 25°C greater than about 5 Gpa. Wherein the substrate is a ceramic substrate, the cured underfill material has a CTE below Tg of about 18 ppm/°C to about 21 ppm/°C, and a CTE above the Tg of about 85 ppm/°C. However, wherein the substrate is an organic substrate, the cured underfill material has a CTE below Tg of about 12 ppm/°C to about 25 ppm/°C, and a CTE above the Tg of about 70 ppm/°C.

Please delete Paragraph [0049] beginning on page 13, and replace it with the following amended paragraph:

[0049] Fig. 15 is a graphical representation of the comparative results of an underfilled solder interconnection grid array residing between a board and a substrate in accordance with the present invention versus ~~an~~a non-underfilled solder interconnection grid array residing between a board and substrate.

Please delete Paragraph [0071] beginning on page 24, and replace it with the following amended paragraph:

[0071] As an alternative, one or more substantially rigid metallic balls 200 may be positioned at desired locations within the solder interconnection grid arrays 140 and 170. Referring to Figs. 8 and 9, these metallic balls 200 may include, but are not limited to, copper balls, copper alloy balls, a variety of other solderable alloys, or even combinations thereof. The metallic balls 200 may be positioned such that they are located at specific locations on either the substrate 130 or interposer 160, or even on the board 180, before joining the substrate 130 or interposer 160 to the board via solder interconnection grid arrays 140 and 170, respectively. The desired locations of such metallic balls 200 are selected based on model predictions of locations that will have the highest creep point, thereby reducing the creep risk of solder joints within solder interconnection grid arrays 140 or 170. That is, the use of one or more substantially rigid metallic balls 200 within solder interconnection grid arrays 140 or 170 improves creep resistance of such solder interconnections. For example, one or more copper balls 200, having appropriate height and size so as to allow assembly of all other electrically valid joints while taking into account the ceramic substrate

~~camber~~chamber, may be positioned on the ceramic substrate in locations that depend on the available redundant ground/power and the mechanical model results.

Please delete Paragraph [0072] beginning on page 24, and replace it with the following amended paragraph:

[0072] The use of the one or more substantially rigid metallic balls 200 within solder interconnection grid arrays 140 or 170 may be alone, as shown in Fig. 8, or may be used in combination with underfill material 190 that entirely encapsulates, as shown in Fig. 9, or partially encapsulates the solder interconnection at specific locations. Wherein the assembly is provided with both one or more substantially rigid metallic balls 200 in combination with underfill material 190 (Fig. 9), the assembly is advantageously provided with both improved creep resistance and fatigue enhancement. In so doing, a critical feature is that the solder interconnection grid arrays and the rigid metallic balls be attached first to either the substrate, interposer, board or alternating surfaces thereof, and then once attached, the substrate or interposer is attached to the board via the solder interconnection grid arrays and rigid metallic balls. The assembly is then ~~preferable~~ preferably cleaned to improve adhesion of the underfill material, and finally the underfill material is provided between the substrate (or interposer) and board in a sufficient amount such that it either fully encapsulates the solder interconnection or partially encapsulates the solder interconnection at specific locations while adhering sufficiently strongly to surfaces of both the substrate (or interposer) and board.